Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8468
Harrisburg, PA 17105-8468

October 3, 2001

Bureau of Air Quality 717-787-9702

Judith M. Katz, Director
Air Protection Division (3AP00)
U.S. Environmental Protection Agency
1650 Arch Street - 14th Floor
Philadelphia, PA 19103

Dear ~~Ms Katz:~~ Judy

This is to clarify Pennsylvania's implementation of contingency measures if a violation of the one-hour ozone standard were to occur in the Pittsburgh-Beaver Valley Area. Under the maintenance plan we submitted to you for SIP approval on May 21, 2001 on pages 43-44 we indicate that in the event of a violation, the Commonwealth will adopt additional emission reductions as expeditiously as practicable in accordance with the Pennsylvania Air Pollution Control Act, to return the area to attainment of the health-based one-hour standard.

Furthermore, contingency provisions would be implemented by the Commonwealth in accordance with section 175A(d) of the federal Clean Air Act which states "...that the State promptly correct any violation of the standard which occurs after redesignation of the area as an attainment area."

In general, Pennsylvania's process takes between 12 and 24 months to complete regulatory actions under the Pennsylvania Air Pollution Control Act and related regulatory requirements.

I assure you that in the event of a violation in the Pittsburgh-Beaver Valley Area, the Commonwealth has every intention of implementing its contingency plan such that the area returns to attainment of the one-hour standard as expeditiously as practical to protect the health and welfare of the citizens who reside and work there.

Sincerely,

James M. Salvaggio
Director

APPENDIX A: Pennsylvania's CTG Rules

APPENDIX B: EPA policy memos and guidance

APPENDIX C: Air Quality Data and Clean Data Determination TSD

APPENDIX A

PENNSYLVANIA VOC & NOx CONTROL STRATEGIES

CONTROL PROGRAM (ALL MEASURES ARE STATEWIDE UNLESS OTHERWISE NOTED)	RULES* ADOPTED?	EPA APPROVED?	APPLICABILITY	COMMENTS
VOC STATIONARY & AREA SOURCE CONTROL STRATEGIES				
Group I CTG Rules				
Gasoline Loading Terminals	Y	Y	Consistent with CTG	
Gasoline Bulk Plants	Y	Y	Consistent with CTG	
Service Stations - Stage I	Y	Y	Consistent with CTG	applies to all small gasoline storage tanks (all tanks 2000 gallons)
Fixed Roof Petroleum Tanks	Y	Y	Consistent with CTG	
Miscellaneous Refinery Sources	Y	Y	Consistent with CTG	
Cutback Asphalt	Y	Y	Consistent with CTG	
Solvent Metal Cleaning	Y	Y	Consistent with CTG	
Surface Coating of Cans	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Metal Coils	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Fabrics	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Paper Products	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Automobiles and Light Duty Trucks	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Metal Furniture	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Magnet Wire	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Large Appliances	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Group II CTG Rules				
Leaks from Petroleum Refineries	Y	Y	Consistent with CTG	
Miscellaneous Metal Parts Surface Coating	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day
Surface Coating of Flat Wood Paneling	Y	Y	Consistent with CTG	2.7 TPY facility wide, 3 lb/hr, 15 lb/day

CONTROL PROGRAM (ALL MEASURES ARE STATEWIDE UNLESS OTHERWISE NOTED)	RULES* ADOPTED?	EPA APPROVED?	APPLICABILITY	COMMENTS
Synthetic Pharmaceutical Manufacture	Y	Y	Consistent with CTG	
Rubber Tire Manufacture	Y	Y	Consistent with CTG	
External Floating Roof Petroleum Tanks	Y	Y	Consistent with CTG	
Graphic Arts	Y	Y	Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Perchloroethylene Dry Cleaning	Y	Y	Consistent with CTG	
Gasoline Truck Leaks and Vapor Collection	Y	Y	Consistent with CTG	
Group III CTG Rules				
Manufacture of High-Density Polyethylene, Polypropylene, & Polystyrene Resins	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Fugitive Emissions from Synthetic Chemical, Polymer & Resin Manufacturing Equipment	Y	Y	Applies to sources with a potential to emit > 100 tons of VOC per year.	
Large Petroleum Dry Cleaners	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industries	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Equipment Leaks from Natural Gas/gasoline Processing Plants	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Other Control Measures	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	Additional EPA approved VOC rules - ethylene production (no emissions into the outdoor atmosphere are permitted) and manufacture of surface active agents (>100 tons/yr).
Adhesives	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Aerosol Paints	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	

Aerospace Manufacturing and Rework	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Aluminum Rolling Mills	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Architectural and Industrial Maintenance Coatings	NR		The State relies on the Federal Rule.	
Autobody Refinishing	NR		The State relies on the Federal Rule.	
Automobile Assembly	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Bakeries	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Batch Processes	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Coke By-Product Recovery Plants	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Coke Oven Batteries	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Commercial Ethylene Oxide Sterilization	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Consumer and Commercial Products	NR		The State relies on the Federal Rule.	
Degreasing	Y	Y	Applies to all degreasers which have a degreaser opening > 10 square feet.	
Glass Forming	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Graphic Arts Rotogravure and Flexographic Printing	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Highway Paints	NR		The State relies on the Federal Rule.	
Industrial Wastewater Treatment	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Iron and Steel Foundries	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Iron and Steel Industry/Sinter Plants	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Landfill Gases	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Marina Gasoline Refueling	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Marine Vessel Loading	Y	Y	Applies to all organic liquid cargo vessel loading.	Philadelphia area only.

Offset Lithographic Printing	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Pesticide Application	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Pharmaceuticals	Y	Y	Applies to facilities that emit 15 lb/day or more of VOC.	
Publicly Owned Treatment Works	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Pulp and Paper	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Rule Effectiveness Improvement	Y			Philadelphia area only -- contingency measure
Shipbuilding and Ship Repair	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Stage II Vapor Recovery	Y	Y	Applies to facilities located in areas classified as moderate, serious or severe with monthly throughputs >10,000 gallons.	Philadelphia - fully implemented, Pittsburgh - implementation phased-in 4/1997 - 12/2000.
Surface Coating of Plastic Parts	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Synthetic Organic Chemical Manufacturing Industry Reactor and Distillation Processes	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Treatment, Storage and Disposal Facilities	NR		The State relies on the Federal Rule.	
Underground Storage Tank Vents	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Volatile Organic Liquids Storage	see note		Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	
Wood Furniture Coating	Y	N	Applies to Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC	PA is revising its state rule, and will submit in 1998.

OTHER VOC CONTROL MEASURES:
Manufacture of Surface Active Agents -- EPA approved -- Applies to: Philadelphia >25 tpy VOC & rest of State > 50 tpy VOC

NOTES:
PA adopted and submittal as a SIP revision a generic VOC & NOx RACT rule which requires case-by-case (source specific) RACT determinations for all major sources in the Commonwealth. PA has adopted/is adopting case-by-case (source specific) VOC & NOx

RACT regulations for all major sources, statewide. PA is not adopting VOC or NOx source category RACT rules.
A major NOx emitting facility is defined as a facility which emits or has the potential to emit NOx at a rate greater than 25 tons/yr in severe ozone nonattainment area and 100 tons/yr in an area included in an ozone transport region.
A major VOC emitting facility is defined as a facility which emits or has the potential to emit VOCs at a rate greater than 25 tons/yr in severe ozone nonattainment area and 50 tons/yr in an area included in an ozone transport region.

VOC/NOx Control Strategies List taken from STAPPA/ALAPCO documents "Meeting the 15-Percent rate-of-Progress Requirement Under the Clean Air Act - A Menu of Options" (September 1993) and "Controlling Nitrogen Oxides Under the Clean Air Act - A Menu of Options" (July 1994)

APPENDIX B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 14 1994

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment

FROM: Mary D. Nichols
Assistant Administrator
for Air and Radiation (6101)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Introduction

With this memorandum, EPA is amending one aspect of guidance issued September 4, 1992[1] and September 17, 1993[2] regarding requirements for nonattainment areas requesting redesignation to attainment. In these previous memoranda, EPA indicated that States must submit and receive full approval of any part D NSR regulations that were required by the Act to be submitted to EPA prior to or at the time of the submission of a complete redesignation request. The EPA has reconsidered that policy, however, and is establishing a new policy under which

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[1]Memorandum entitled, "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Calcagni, Director, Air Quality Management Division, to Regional Air Division Directors.

[2]Memorandum entitled, "SIP Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and CO NAAQS On or After November 15, 1992," from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, to Regional Air Division Directors.

nonattainment areas may be redesignated to attainment notwithstanding the lack of a fully-approved part D NSR program, provided the program is not relied upon for maintenance. In addition, EPA is not requiring that existing part D NSR rules be placed in the contingency portion of the maintenance plan pursuant to section 175A of the Act. As discussed below, however, EPA believes its new policy will assure that the statutory goals of part D NSR and section 175A to protect and maintain the NAAQS are achieved.

The EPA believes that this new policy is justifiable under the Agency's general authority to establish de minimis exceptions to statutory requirements where the application of the statutory requirements would be of trivial or no value environmentally. [See Alabama Power Co. v. Costle, 636 F.2d 323, 360-61 (D.C. Cir. 1979).]

II. Background/Clean Air Act Requirements

Section 107(d)(3)(E) of the Act requires that a State have in place a fully-approved SIP meeting all the requirements applicable to a nonattainment area under section 110 and part D of title I of the Act in order for the area to be redesignated to attainment.

In addition, section 175A requires that the area must have a fully-approved maintenance plan containing contingency provisions, as necessary, to promptly correct any violation of the applicable NAAQS that occurs after redesignation of the area. At a minimum, the contingency plan must "include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area."

The NSR requirements are contained in section 110(a)(2)(C) and in parts C and D of title I of the Act. Broadly speaking, section 110(a)(2)(C) of the Act mandates the development of a preconstruction review program to assure that the construction or modification of any stationary source is consistent with attainment of the NAAQS. The nonattainment NSR program in part D NSR and the attainment area prevention of significant deterioration (PSD) program in part C apply to major new sources and modifications of existing major sources. (Implementing regulations that set forth minimum requirements for State or local programs and Federal permitting programs have been promulgated at 40 CFR part 51 subpart I and appendix S, and 40 CFR section 52.21, respectively.)

To assure that major new or modified sources do not interfere with reasonable further progress towards attainment, nonattainment area part D NSR requires installation of control

technology representing the lowest achievable emissions rate (LAER) and emission offsets. To prevent "clean air" areas from significant degradation, the PSD program requires installation of best available control technology (BACT) and modeling to show that the new or modified source will not cause or contribute to violation of a NAAQS or a PSD air quality growth increment.

Previously, EPA interpreted these provisions together to require that any area seeking redesignation to attainment must have fully-approved part D NSR rules as part of the required fully-approved SIP. In addition, upon redesignation, the part D NSR rules were to be placed in the maintenance plan contingency provisions in accordance with section 175A of the Act unless the area needed to continue implementing part D NSR as one element of the maintenance strategy.

III. NSR Policy and Legal Rationale

The EPA now believes that a de minimis exception to the requirement of section 107(d)(3)(E) for part D NSR is justifiable because requiring the adoption and full approval of a part D NSR program as a prerequisite to redesignation would not be of significant environmental value in certain circumstances. The EPA has reconsidered its earlier position because, once an area is redesignated to attainment, the part D NSR program may be replaced by the corollary PSD program, if it is shown through the maintenance demonstration that the area will maintain without part D NSR and because part D NSR need not become part of the contingency plan.

A. Preconstruction Review Programs in Attainment Areas

There are several provisions in the Act and in EPA's regulations that require preconstruction review of new or modified major sources in attainment areas to assess the impact of the proposed emissions increases on the applicable NAAQS. These include the PSD program which covers 100 ton per year (tpy) or 250 tpy or greater sources (depending on the source category), the preconstruction review requirements of 40 CFR 51.165(b) that cover 100 tpy or greater sources, and the Interpretive Offset Rule. As to ozone, there are some particular requirements that apply. The EPA believes these programs will ensure that major new sources and modifications are given adequate preconstruction review.

After redesignation to attainment, State PSD rules, or Federal PSD rules in a delegated program, must ensure, as required by sections 165(a)(3)(B) and 110(a)(2)(C) of the Act, that preconstruction review of new and modified major sources will prevent increases in emissions that would cause or contribute to violations of the NAAQS. [See 40 CFR 51.166(k), 40 CFR 52.21(k).]

In addition, EPA's regulations at 40 CFR 51.165(b) require that SIP's contain preconstruction review requirements that apply to new or modified 100 tpy or greater sources of a pollutant in areas designated attainment or unclassifiable for the pollutant in cases where the new or modified source would contribute to a violation of a NAAQS. This requirement provides for preconstruction review for sources that are exempt from PSD due to PSD's higher (250 tpy) major source threshold for certain source categories.

In the absence of SIP provisions that comply with 40 CFR 51.165(b) or a part D NSR program, States would have to use the Interpretive Offset Rule at 40 CFR 51 appendix S as a surrogate rule for permitting new and modified major sources in these attainment areas. (See 45 FR 31310, May 13, 1980.)

For SO_2, PM-10, NO_2, and CO, EPA has established levels of ambient impacts to determine whether the major new or modified source would cause or contribute to a violation. Where the source is found to cause or contribute to a violation, the source would be subject to more stringent technology and emissions mitigation requirements of appendix S or a 40 CFR 51.165(b) program.

With particular respect to ozone, because of the difficulty in modeling the impact of emissions from specific sources on ozone formation, EPA regulations [40 CFR 51.165(b)(3) and appendix S] do not fully address how emissions of ozone precursors should be treated to assure that major new or modified sources do not cause or contribute to a NAAQS violation. Nevertheless, if preconstruction monitoring or other information indicates the area is not continuing to meet the standard after redesignation to attainment, appendix S or a 40 CFR 51.165(b) program would also apply. The EPA believes that in any area that is designated or redesignated as attainment under section 107, but experiences violations of the NAAQS, these provisions (and any implementing SIP provisions) should be interpreted as requiring major new or modified sources to obtain VOC emission offsets of at least a 1:1 ratio, and as presuming [consistent with section 182(f)] that 1:1 NOx offsets are necessary.[3]

In addition, attainment (PSD) plans require that major new and modified sources apply BACT. Generally, BACT differs from LAER by enabling permitting authorities to justify, based on

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[3]The EPA is in the process of revising EPA's rules for NSR and PSD, some of which will replace appendix S. However, the proposed revisions will not change the substantive permitting requirements where an attainment area is violating the ozone NAAQS.

economic, energy, and environmental impacts, the use of control technologies less effective than the most stringent available. In an area that is not meeting the NAAQS, EPA believes that due to consideration of the NAAQS violations, the State may impose a more stringent level of control than might be otherwise selected as BACT. [See Draft New Source Review Manual, page B.54 (October 1990).]

Taken together, these preconstruction review programs can assure that major new or modified sources achieve the statutory goals of part D NSR and the maintenance provisions of section 175A.

B. Part D NSR and Contingency Provisions

Requiring the full approval of a part D NSR program would ensure that the program would become a contingency provision in the maintenance plan. As stated above, pursuant to section 175A(d) and section 107(d)(3)(E), the contingency plan must contain, at a minimum, all measures contained in the nonattainment SIP. However, EPA is interpreting the term "measure" as used in section 175A(d) so as not to include part D NSR.

The term "measure" is not defined in section 175A(d) and Congress utilized that term differently in different provisions of the Act with respect to the PSD and part D NSR permitting programs. For example, in section 110(a)(2)(A), Congress required that SIP's include "enforceable emission limitations and other control measures, means, or techniques . . . as may be necessary or appropriate to meet the applicable requirements of the Act." In section 110(a)(2)(C), Congress required that SIP's include "a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D (i.e., PSD and part D NSR)." [Emphasis added.]

If the term "measures," as used in sections 110(a)(2)(A) and 110(a)(2)(C), had been intended to include PSD and part D NSR, there would have been no point to requiring that SIP's include both measures and preconstruction review under parts C and D (PSD or part D NSR). Thus, in sections 110(a)(2)(A) and (C), it is apparent that Congress distinguished the requirement for "measures" from the requirement for preconstruction review programs. On the other hand, in other provisions of the Act, such as section 161, Congress appears to have included PSD within the scope of the term "measures."

The fact that Congress used the undefined term "measure" differently in different provisions of the Act indicates that the term is susceptible to more than one interpretation and that EPA has the discretion to interpret it in a reasonable manner in the context of section 175A. Inasmuch as Congress itself has used the term in a manner that excluded PSD and part D NSR from its scope, EPA believes it is reasonable to interpret "measure," as used in section 175A(d), not to include part D NSR. The reasonableness of this interpretation is further supported by the fact that PSD, a program that is the corollary of part D NSR for attainment areas, goes into effect in lieu of part D NSR,[4] and that, as discussed above, EPA intends to implement the PSD and other NSR programs in a way that will achieve the basic statutory goals of part D NSR. Therefore, EPA does not believe that part D NSR need be part of an area's contingency plan.

IV. Other Required Programs

The EPA is not changing its previously stated policy with respect to the need for States to adopt and receive full approval of other programs required by the Act prior to or at the time of the submission of a redesignation request. The existence of a corollary program for attainment areas distinguishes part D NSR from other required programs under the Act, such as enhanced inspection and maintenance and reasonably available control technology (RACT) programs, which have no corollary program. Moreover, EPA believes that those other required programs are clearly within the scope of the term "measure" as used in section 175A.

For further information regarding part D NSR requirements for areas redesignating to attainment, please contact Carla Oldham at (919) 541-3347; for general information about PSD requirements for attainment areas, contact Dennis Crumpler at (919) 541-0871.

cc: Air Branch Chief, Regions I-X

[4]EPA is not suggesting that NSR and PSD are equivalent, but merely that they are the same type of program.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

NOV 30 1993

MEMORANDUM

SUBJECT: Use of Actual Emissions in Maintenance Demonstrations for Ozone and Carbon Monoxide (CO) Nonattainment Areas

FROM: D. Kent Berry, Acting Director
Air Quality Management Division (MD-15)

Kent Berry

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

This memorandum provides guidance on the use of actual emissions in maintenance demonstrations for ozone and CO nonattainment areas seeking redesignation to attainment. This guidance supersedes previous Environmental Protection Agency (EPA) guidance set forth in the September 4, 1992 memorandum from John Calcagni to Air Division Directors, "Procedures for Processing Requests to Redesignate Areas to Attainment" (redesignation policy), which required emission projections for these areas to be based on allowable emissions.

The EPA has previously issued guidance on the use of actual emissions in projecting emissions to meet the requirements for the 15 percent rate-of-progress plans for ozone nonattainment areas.[1] For consistency, this memorandum extends the policy of using actual emissions to maintenance projections for ozone and CO areas, as well. This guidance is not intended to apply to emission projections in control programs for the other criteria pollutants (see discussion under "Other Pollutants").

[1]See Guidance for Growth Factors, Projections, and Control Strategies for the 15 Percent Rate-of Progress Plans (EPA-452/R-93-002, March 1993).

Ozone and CO Policy

Actual emissions from a source are the emissions based on the source's actual operating hours, production rates, and control equipment for the processes carried out at the source. Actual emissions take into consideration normal operating conditions as well as instances when deviations occur. For ozone and CO areas, the term allowable emissions refers to emissions estimates based on enforceable emission rates and actual production rates and hours.

Consistent with the earlier rate-of-progress plan guidance, ozone and CO maintenance projections may be based on actual emissions for sources or source categories that are currently subject to a regulation and that the State does not anticipate subjecting to additional regulation. Similarly, the maintenance projections may be based on actual emissions for sources or source categories that are currently unregulated and are not expected to be subject to future regulation. (The State still has the option of using allowable emissions for these two cases.) However, for sources that are expected to be subject to additional regulation, the projections must be based on the new allowable emissions limits because the new actual emissions are not yet known.

Upon approval of a redesignation request and associated maintenance plan by EPA, all future emissions calculations or projections to implement other air quality requirements for an area must be consistent with the maintenance demonstration (unless a more stringent requirement applies). For example, if projected emissions from a source used in the maintenance demonstration are based on actual emissions, that source must use actual emissions in determining the credit available for emissions trading, innovative strategies, economic incentive plans, and emissions budgets.

Other Pollutants

Under the redesignation policy, emissions projections for particulate matter (PM-10), sulfur dioxide (SO2), nitrogen dioxide, and lead (Pb) nonattainment areas are still required to follow current EPA modeling guidance.[2] The modeling guidance requires that maximum allowable emission limits for major point sources be used in demonstrating maintenance of short-term

[2]The EPA-approved modeling guidance may be found in the following documents: "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, July 1987) and "PM-10 SIP Development Guideline" (EPA-450/2-86-001, June 1987).

standards.[3] It is necessary to continue the use of maximum allowable emissions when projecting emissions for these nonattainment areas because, in some cases, large point sources operating at full capacity could by themselves cause an exceedance of the applicable national ambient air quality standard. In contrast, large point sources are not likely to be dominant emission sources in inventories for ozone and CO nonattainment areas, and it is unlikely that the multitude of smaller sources would be operating at maximum capacity simultaneously.

For further information regarding the use of actual and allowable emissions for maintenance demonstrations for ozone and CO areas, please contact Carla Oldham at (919) 541-3347. For information on projecting emissions for SO2, PM-10, and Pb nonattainment areas, please contact Robin Dunkins at (919) 541-5335.

cc: Air Branch Chief, Regions I-X
John Cabaniss, OMS
Mary Henigin, OAQPS
Bob Kellam, TSD
Rich Ossias, OGC
John Rasnic, SSCD
John Seitz, OAQPS
Ann Goode, OAR
Lydia Wegman, OAQPS

[3]Maximum allowable emissions are calculated using the enforceable (i.e., allowable) emission rate multiplied by the maximum operating capacity of that source at continuous operation (unless there are federally-enforceable limits on the hours of operation).

Copy to staff

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

1 JUN 1992

MEMORANDUM

SUBJECT: Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations

FROM: G.T. Helms, Chief G. T. Helms
Ozone/Carbon Monoxide Programs Branch (MD-15)

TO: Air Branch Chief, Regions I-X

Several Regions have asked for specific examples of what a contingency plan should contain. In general, a contingency plan should identify the measures that the State will adopt and the factors that will determine when the measures will be adopted. An example of this is attached. The attached example is only one approach to the contingency plan; it is not the only approach.

If you have any further questions concerning this subject, please contact Laurel Schultz at (919) 541-5511.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 28 1992

MEMORANDUM

SUBJECT: State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (Act) Deadlines

FROM: John Calcagni, Director
Air Quality Management Division, OAQPS (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides, and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

The purpose of this memorandum is to clarify issues related to redesignation requests and SIP actions submitted in response to Act deadlines, and specifically address SIP elements that are due November 15, 1992. The following topics are addressed below: completeness determinations on commitment submittals; requests for parallel processing to meet Act deadlines; effect of redesignation requests on mandatory Act submittals; completeness determinations on emission inventory submittals; and issuing letters to the States making a finding of failure to submit a required SIP, or SIP element.

Completeness Determinations on Commitment Submittals

In anticipation of commitment SIP's being submitted to the Environmental Protection Agency (EPA) as authorized by section 110(k)(4) of the Act, my staff are working with the Office of General Counsel (OGC) to revise the completeness criteria in Appendix V of 40 CFR Part 51.[1] Specifically, it is our intent to include specific completeness criteria for committal SIP's.

[1] A July 22, 1992 memorandum from Michael Shapiro identified a number of statutory requirements for which EPA is inclined to accept committal SIP's. (A clarification of that memorandum was issued by Michael Shapiro on September 16, 1992.)

The current completeness criteria do not address commitments submitted under section 110(k)(4) of the Act. However, we are interpreting section 110(k)(4) as allowing EPA to accept commitments from a State as complete submittals even though commitments will lack some of the substantive elements required under the current completeness criteria. Consequently, committal SIP's submitted to EPA should be reviewed against only those elements of the completeness criteria that are directly applicable to commitments in order to be determined complete. The elements of the completeness criteria that are applicable to commitments are:

1. A formal letter of submittal from the Governor or his designee requesting EPA approval of the commitment.

2. The commitment was subject to a public hearing pursuant to 40 CFR 51.102.

3. The submittal contains a schedule for the adoption of the statutorily required measures.

Additionally, States should be encouraged to submit documentation and a justification explaining the need for a commitment.

If a Regional Office receives a submittal that contains one or more commitments in association with other rules or control measures, the Region should consult with the responsible Headquarters program office to determine if a commitment is acceptable in that specific circumstance. (Please refer to my July 9, 1992 memorandum entitled "Processing of State Implementation Plan Submittals," specifically the part on conditional approvals.) If EPA determines that it will consider the commitment under the conditional approval process, the commitment should be reviewed only as to the criteria that would be applicable for commitments. However, if EPA determines that a commitment cannot be used to meet the statutory requirement, the submittal should be reviewed against all elements of the completeness criteria.

Requests for Parallel Processing to Meet Act Deadlines

The EPA expects a number of States to request parallel processing of draft rules as a way to meet Act deadlines. A State request for parallel processing is not an official submittal satisfying a statutory deadline since it is a draft rule (i.e., the State has yet to adopt the regulation).

When the completeness criteria were promulgated with an exception for parallel processing, EPA was not anticipating submittals subject to statutory deadlines. The intent was to continue the timesaving concept of parallel processing State-initiated actions. However, the exceptions in the completeness criteria could be interpreted as requiring EPA to accept draft

rules in order to meet statutory deadlines. As noted above, draft submittals are not considered plan submittals under the Act because they have not been adopted by the State. Consequently, EPA is not precluded from making a finding of failure to submit a required SIP element when a State submits a draft rule.

If a request for parallel processing is submitted to EPA before the statutory deadline, EPA may agree to parallel process the action. However, EPA will not make a completeness finding under section 110(k)(1) since that section applies to official plan submittals and not draft rules. However, if the statutory deadline passes and a State has not submitted the fully-adopted regulation, the Regions should make a finding of failure to submit under section 179(a)(1). This will initiate the sanctions time clock.

Subsequently, if a State submits a fully-adopted rule or maintenance plan, EPA will review the submittal against the completeness criteria. The EPA will commence rulemaking action if the submittal is complete. If the completeness criteria are met, a finding of completeness will stop the time clock for sanctions. If the completeness criteria are not met, EPA should make a finding of incompleteness, thereby maintaining the previous time clock for sanctions.

Because the parallel processing exception could be interpreted to require EPA to accept draft rules as meeting a statutory deadline, we are presently revising the completeness criteria to remove the parallel processing exception. It should be noted, however, that although parallel processing submittals are not official plan submittals, EPA will continue to use parallel processing as an effective avenue for approving State rules expeditiously.

Effect of Redesignation Requests on Mandatory Act Submittals

It has come to our attention that some States plan to submit redesignation requests prior to November 15, 1992 with the understanding that this will exempt them from implementing mandatory Act programs due to start in November (e.g., oxygenated fuels program, stage II vapor recovery rules, etc.). The approvability of a redesignation request is based on the requirements applicable as of the date of submittal of a complete redesignation request.[2] States, however, are statutorily

[2] For a redesignation request to be complete, any portions of the redesignation request that are SIP revisions (e.g., maintenance plans and any additional control measures) must meet the completeness criteria for SIP revisions. Redesignation requests submitted for parallel processing will not be considered official submittals; therefore, they will not be treated as complete submittals.

obligated to meet SIP requirements that become due any time before an area is actually redesignated to attainment. Such redesignation occurs when EPA has taken final rulemaking action to approve a redesignation request.

Hence, if there is a failure by the State to meet a statutory deadline for an area (before EPA has redesignated the area as attainment), a finding of failure to submit should be made. This, in turn, begins the sanctions process under section 179(a) (see September 4, 1992 memorandum, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment"). The findings letter should recognize any pending redesignation request, note the State's statutory obligation to implement any mandatory requirements that are due, and indicate that one of the sanctions will be imposed after 18 months unless EPA approves the redesignation request before the 18-month period has ended. Thus, the Regions should make all reasonable attempts to ensure that the redesignation approval process does not take over 18 months.

Completeness Determinations on Emission Inventory Submittals

In a September 29, 1992 memorandum from William Laxton and myself addressing public hearing requirements for emission inventory submittals, it was stated that EPA was providing a "de minimis" deferral of the public hearing requirement for emission inventory submittals. In that memorandum, it was also stated that if emission inventory submittals do not meet the completeness criteria (except for the deferred public hearing requirement), EPA should make a finding of incompleteness. However, that memorandum did not specify the process for making completeness determinations on emission inventory submittals that only lack the public hearing element.

After discussion with OGC, we have determined that for the emission inventory submittals that are only lacking evidence of a public hearing, EPA should make a finding of completeness contingent upon the State fulfilling the public hearing requirement. The completeness letter to the State should indicate that the completeness determination is contingent upon the State's fulfilling the public hearing requirement by the time identified in the September 29 memorandum. If the public hearing requirement is not met by the time specified, then EPA will make a finding of incompleteness on the original emission inventory submittal. The completeness letter should further state that the public hearing requirement must be met before or at the time of submittal of a rate-of-progress or maintenance plan, or at the time the inventory takes on regulatory significance such as providing a basis for banking or trading.

As noted in the September 29 memorandum, EPA also is providing a "de minimis" deferral of the requirement for EPA to take action on the emission inventory submittals. The 12-month statutory timeframe for approving or disapproving the emission inventory submittal will start at the time the public hearing requirement is met. If EPA has found the submittal incomplete, EPA will not be required to take approval action on the submittal.

Issuing Letters to the States Making a Finding of Failure to Submit a Required SIP or SIP Element

The Regional Offices should be planning to issue findings of failure to submit to States not meeting the November 1992 (and other) statutory deadlines. The Agency has taken a strong stance that such findings should be made soon after a due date has passed. Notice that a State has failed to submit a SIP, or SIP element, is made in the form of a letter from the Regional Administrator to the Governor of a State. Please refer to the July 22, 1992 Shapiro memorandum, entitled "Guidelines for State Implementation Plan (SIP) Submittals Due November 15, 1992," for further information. Further guidance will be made available on the schedule and format of the findings.

If you have any questions on this memorandum, please contact Denise Gerth at (919) 541-5550.

cc: Chief, Air Programs Branch, Regions I-X
John Cabaniss
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

4 SEP 1992

MEMORANDUM

SUBJECT: Procedures for Processing Requests to Redesignate Areas to Attainment

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

Purpose

The Office of Air Quality Planning and Standards (OAQPS) expects that a number of redesignation requests will be submitted in the near future. Thus, Regions will need to have guidance on the applicable procedures for handling these requests, including maintenance plan provisions. This memorandum, therefore, consolidates the Environmental Protection Agency's (EPA's) guidance regarding the processing of requests for redesignation of nonattainment areas to attainment for ozone (O_3), carbon monoxide (CO), particulate matter (PM-10), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). Regions should use this guidance as a general framework for drafting Federal Register notices pertaining to redesignation requests. Special concerns for areas seeking redesignation from unclassifiable to attainment will be addressed on a case-by-case basis.

Background

Section 107(d)(3)(E) of the Clean Air Act, as amended, states that an area can be redesignated to attainment if the following conditions are met:

1. The EPA has determined that the national ambient air quality standards (NAAQS) have been attained.

2. The applicable implementation plan has been fully approved by EPA under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and Part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Each of these criteria is discussed in more detail in the following paragraphs. Particular attention is given to maintenance plan provisions at the end of this document since maintenance plans constitute a new requirement under the amended Clean Air Act. Exceptions to the guidance will be considered on a case-by-case basis.

1. Attainment of the Standard

The State must show that the area is attaining the applicable NAAQS. There are two components involved in making this demonstration which should be considered interdependently. The first component relies upon ambient air quality data. The data that are used to demonstrate attainment should be the product of ambient monitoring that is representative of the area of highest concentration. These monitors should remain at the same location for the duration of the monitoring period required for demonstrating attainment. The data should be collected and quality-assured in accordance with 40 CFR 58 and recorded in the Aerometric Information Retrieval System (AIRS) in order for it to be available to the public for review. For purposes of redesignation, the Regional Office should verify that the integrity of the air quality monitoring network has been preserved.

For PM-10, an area may be considered attaining the NAAQS if the number of expected exceedances per year, according to 40 CFR 50.6, is less than or equal to 1.0. For O_3, the area must show that the average annual number of expected exceedances, according to 40 CFR 50.9, is less than or equal to 1.0 based on data from all monitoring sites in the area or its affected downwind environs. In making this showing, both PM-10 and O_3 must rely on 3 complete, consecutive calendar years of quality-assured air quality monitoring data, collected in accordance with 40 CFR 50, Appendices H and K. For CO, an area may be considered attaining the NAAQS if there are no violations, as determined in accordance

with 40 CFR 50.8, based on 2 complete, consecutive calendar years of quality-assured monitoring data. For SO_2, according to 40 CFR 50.4, an area must show no more than one exceedance annually and for Pb, according to section 50.12, an area may show no exceedances on a quarterly basis.

The second component relies upon supplemental EPA-approved air quality modeling. No such supplemental modeling is required for O_3 nonattainment areas seeking redesignation. Modeling may be necessary to determine the representativeness of the monitored data. For pollutants such as SO_2 and CO, a small number of monitors typically is not representative of areawide air quality or areas of highest concentration. When dealing with SO_2, Pb, PM-10 (except for a limited number of initial moderate nonattainment areas), and CO (except moderate areas with design values of 12.7 parts per million or lower at the time of passage of the Clean Air Act Amendments of 1990), dispersion modeling will generally be necessary to evaluate comprehensively sources' impacts and to determine the areas of expected high concentrations based upon current conditions. Areas which were designated nonattainment based on modeling will generally not be redesignated to attainment unless an acceptable modeling analysis indicates attainment. Regions should consult with OAQPS for further guidance addressing the need for modeling in specific circumstances.

2. State Implementation Plan (SIP) Approval

The SIP for the area must be fully approved under section 110(k),[1] and must satisfy all requirements that apply to the area. It should be noted that approval action on SIP elements and the redesignation request may occur simultaneously. An area cannot be redesignated if a required element of its plan is the subject of a disapproval; a finding of failure to submit or to implement the SIP; or partial, conditional, or limited approval. However, this does not mean that earlier issues with regard to the SIP will be reopened. Regions should not reconsider those things that have already been approved and for which the Clean Air Act Amendments did not alter what is required. In contrast, to the extent the Amendments add a requirement or alter an existing requirement so that it adds something more, Regions should consider those issues. In addition, requests from areas known to be affected by dispersion techniques which are inconsistent with EPA guidance will continue to be considered unapprovable under section 110 and will not qualify for redesignation.

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[1]Section 110(k) contains the requirements for EPA action on plan submissions. It addresses completeness, deadlines, full and partial approval, conditional approval, and disapproval.

3. Permanent and Enforceable Improvement in Air Quality

The State must be able to reasonably attribute the improvement in air quality to emission reductions which are permanent and enforceable.[2] Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shutdown due to temporary adverse economic conditions) or unusually favorable meteorology would not qualify as an air quality improvement due to permanent and enforceable emission reductions.

In making this showing, the State should estimate the percent reduction (from the year that was used to determine the design value for designation and classification) achieved from Federal measures such as the Federal Motor Vehicle Control Program and fuel volatility rules as well as control measures that have been adopted and implemented by the State. This estimate should consider emission rates, production capacities, and other related information to clearly show that the air quality improvements are the result of implemented controls. The analysis should assume that sources are operating at permitted levels (or historic peak levels) unless evidence is presented that such an assumption is unrealistic.

4. Section 110 and Part D Requirements

For the purposes of redesignation, a State must meet all requirements of section 110 and Part D that were applicable prior to submittal of the complete redesignation request. When evaluating a redesignation request, Regions should not consider whether the State has met requirements that come due under the Act after submittal of a complete redesignation request.[3]

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[2]This is consistent with EPA's existing policy on redesignations as stated in an April 21, 1983 memorandum titled "Section 107 Designation Policy Summary." This memorandum states that in order for an area to be redesignated to attainment, the State must show that "actual enforceable emission reductions are responsible for the recent air quality improvement." This element of the policy retains its validity under the amended Act pursuant to section 193. [Note: other aspects of the April 21, 1983 memorandum have since been superseded by subsequent memorandums; interested parties should consult with OAQPS before relying on these aspects, e.g. those relating to required years of air quality data.]

[3]Under section 175A(c), however, the requirements of Part D remain in force and effect for the area until such time as it is redesignated. Upon redesignation to attainment, the requirements that became due under section 175A(c) after submittal of the complete redesignation request would no longer be applicable.

However, any requirements that came due prior to submittal of the redesignation request must be fully approved into the plan at or before the time EPA redesignates the area.

To avoid confusion concerning what requirements will be applicable for purposes of redesignation, Regions should encourage States to work closely with the appropriate Regional Office early in the process. This will help to ensure that a redesignation request submitted by the State has a high likelihood of being approved by EPA. Regions should advise States of the practical planning consequences if EPA disapproves the redesignation request or if the request is invalidated because of violations recorded during EPA's review. Under such circumstances, EPA does not have the discretion to adjust schedules for implementing SIP requirements. As a result, an area may risk sanctions and/or Federal implementation plan implementation that could result from failure to meet SIP submittal or implementation requirements.

a. Section 110 Requirements

Section 110(a)(2) contains general requirements for nonattainment plans. Most of the provisions of this section are the same as those contained in the pre-amended Act. We will provide guidance on these requirements as needed.[4]

b. Part D Requirements

Part D consists of general requirements applicable to all areas which are designated nonattainment based on a violation of the NAAQS. The general requirements are followed by a series of subparts specific to each pollutant. The general requirements appear in subpart 1. The requirements relating to O_3, CO, PM-10, SO_2, NO_2, and Pb appear in subparts 2 through 5. In those instances where an area is subject to both the general nonattainment provisions in subpart 1 as well as one of the pollutant-specific subparts, the general provisions may be subsumed within, or superseded by, the more specific requirements of subparts 2 through 5.

If an area was not classified under section 181 for O_3, or section 186 for CO, then that area is only subject to the provisions of subpart 1, "Nonattainment Areas in General." In addition to relevant provisions in subpart 1, an O_3 and CO area, which is classified, must meet all applicable requirements in subpart 2, "Additional Provisions for Ozone Nonattainment Areas," and subpart 3, "Additional Provisions for Carbon Monoxide

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[4]General guidance regarding the requirements for SIP's may be found in the "General Preamble to Title I of the 1990 Clean Air Act Amendments," 57 FR 13498 (April 16, 1992).

Nonattainment Areas," respectively, before the area may be redesignated to attainment. All PM-10 nonattainment areas (whether classified as moderate or serious) must similarly meet the applicable general provisions of subpart 1 and the specific PM-10 provisions in subpart 4, "Additional Provisions for Particulate Matter Nonattainment Areas." Likewise, SO_2, NO_2, and Pb nonattainment areas are subject to the applicable general nonattainment provisions in subpart 1 as well as the more specific requirements in subpart 5, "Additional Provisions for Areas Designated Nonattainment for Sulfur Oxides, Nitrogen Dioxide, and Lead."

i. Section 172(c) Requirements

This section contains general requirements for nonattainment plans. A thorough discussion of these requirements may be found in the General Preamble to Title I [57 FR 13498 (April 16, 1992)]. The EPA anticipates that areas will already have met most or all of these requirements to the extent that they are not superseded by more specific Part D requirements. The requirements for reasonable further progress, identification of certain emissions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard. The requirements for an emission inventory will be satisfied by the inventory requirements of the maintenance plan. The requirements of the Part D new source review program will be replaced by the prevention of significant deterioration (PSD) program once the area has been redesignated. However, in order to ensure that the PSD program will become fully effective immediately upon redesignation, either the State must be delegated the Federal PSD program or the State must make any needed modifications to its rules to have the approved PSD program apply to the affected area upon redesignation.

ii. Conformity

The State must work with EPA to show that its SIP provisions are consistent with section 176(c)(4) conformity requirements. The redesignation request should include conformity procedures, if the State already has these procedures in place. Additionally, we currently interpret the conformity requirement to apply to attainment areas. However, EPA has not yet issued its conformity regulations specifying what areas are subject to the conformity requirement. Therefore, if a State does not have conformity procedures in place at the time that it submits a redesignation request, the State must commit to follow EPA's conformity regulation upon issuance, as applicable. If the State submits the redesignation request subsequent to EPA's issuance of the conformity regulations, and the conformity requirement became applicable to the area prior to submission,

the State must adopt the applicable conformity requirements before EPA can redesignate the area.

5. Maintenance Plans

Section 107(d)(3)(E) of the amended Act stipulates that for an area to be redesignated, EPA must fully approve a maintenance plan which meets the requirements of section 175A. A State may submit both the redesignation request and the maintenance plan at the same time and rulemaking on both may proceed on a parallel track. Maintenance plans may, of course, be submitted and approved by EPA before a redesignation is requested. However, according to section 175A(c), pending approval of the maintenance plan and redesignation request, all applicable nonattainment area requirements shall remain in place.

Section 175A defines the general framework of a maintenance plan. The maintenance plan will constitute a SIP revision and must provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. Section 175A further states that the plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance. Because the Act requires a demonstration of maintenance for 10 years after an area is redesignated (not 10 years after submittal of a redesignation request), the State should plan for some lead time for EPA action on the request. In other words, the maintenance demonstration should project maintenance for 10 years, beginning from a date which factors in the time necessary for EPA review and approval action on the redesignation request. In determining the amount of lead time to allow, States should consider that section 107(d)(3)(D) grants the Administrator up to 18 months from receipt of a complete submittal to process a redesignation request. The statute also requires the State to submit a revision of the SIP 8 years after the original redesignation request is approved to provide for maintenance of the NAAQS for an additional 10 years following the first 10-year period [see section 175A(b)].

In addition, the maintenance plan shall contain such contingency measures as the Administrator deems necessary to ensure prompt correction of any violation of the NAAQS [see section 175A(d)]. The Act provides that, at a minimum, the contingency measures must include a requirement that the State will implement all measures contained in the nonattainment SIP prior to redesignation. Failure to maintain the NAAQS and triggering of the contingency plan will not necessitate a revision of the SIP unless required by the Administrator, as stated in section 175A(d).

The following is a list of core provisions that we anticipate will be necessary to ensure maintenance of the relevant NAAQS in an area seeking redesignation from

nonattainment to attainment. We therefore recommend that States seeking redesignation of a nonattainment area consider these provisions. However, any final EPA determination regarding the adequacy of a maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant information available at the time.

a. Attainment Inventory

The State should develop an attainment emissions inventory to identify the level of emissions in the area which is sufficient to attain the NAAQS.[5] This inventory should be consistent with EPA's most recent guidance on emission inventories for nonattainment areas available at the time and should include the emissions during the time period associated with the monitoring data showing attainment.[6]

Source size thresholds are 100 tons/year for SO_2, NO_2, and PM-10 areas, and 5 tons/year for Pb based upon 40 CFR 51.100(k) and 51.322, as well as established practice for AIRS data. The source size threshold for serious PM-10 areas is 70 tons/year

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[5]Where the State has made an adequate demonstration that air quality has improved as a result of the SIP (as discussed previously), the attainment inventory will generally be the actual inventory at the time the area attained the standard.

[6]The EPA's current guidance on the preparation of emission inventories for O_3 and CO nonattainment areas is contained in the following documents: "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume I" (EPA-450/4-91-016), "Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone: Volume II" (EPA-450/4-91-014), "Emission Inventory Requirements for Ozone State Implementation Plans" (EPA-450/4-91-010), "Emission Inventory Requirements for Carbon Monoxide Implementation Plans" (EPA-450/4-91-011), "Guideline for Regulatory Application of the Urban Airshed Model" (EPA-450/4-91-013), "Procedures for Emission Inventory Preparation: Volume IV, Mobile Sources" (EPA-450/4-81-026d), and "Procedures for Preparing Emission Inventory Projections" (EPA-450/4-91-019). The EPA does not currently have specific guidance on attainment emissions inventories for SO_2. In lieu thereof, States are referred to the guidance on emissions data to be used as input to modeling demonstrations, contained in Table 9.1 of EPA's "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R), July 1987, which is generally applicable to all criteria pollutants. Emission inventory procedures and requirements documents are currently being prepared by OAQPS for PM-10 and Pb; these documents are due for release by summer 1992.

according to Clean Air Act section 189(b)(3). However, the inventory should include sources below these size thresholds if these smaller sources were included in the SIP attainment demonstration. Where sources below the 100, 70, and 5 tons/year-size thresholds (e.g., areas with smaller source size definitions) are subject to a State's minor source permit program, these sources need only be addressed in the aggregate to the extent that they result in areawide growth.

For O_3 nonattainment areas, the inventory should be based on actual "typical summer day" emissions of O_3 precursors (volatile organic compounds and nitrogen oxides) during the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas to reconcile milestones. For CO nonattainment areas, the inventory should be based on actual "typical CO season day" emissions for the attainment year. This will generally correspond to one of the periodic inventories required for nonattainment areas.

b. Maintenance Demonstration

A State may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. Under the Clean Air Act, many areas are required to submit modeled attainment demonstrations to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling. In areas where no such modeling was required, the State should be able to rely on the attainment inventory approach. In both instances, the demonstration should be for a period of 10 years following the redesignation.

Where modeling is relied upon to demonstrate maintenance, each plan should contain a summary of the air quality concentrations expected to result from application of the control strategy. In the process, the plan should identify and describe the dispersion model or other air quality model used to project ambient concentrations (see 40 CFR 51.46).

In either case, to satisfy the demonstration requirement the State should project emissions for the 10-year period following redesignation, either for the purpose of showing that emissions will not increase over the attainment inventory or for conducting modeling.[7] The projected inventory should consider future growth, including population and industry, should be consistent

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[7]Guidance for projecting emissions may be found in the emissions inventory guidance cited in footnote 6.

with the attainment inventory, and should document data inputs and assumptions. All elements of the demonstration (e.g., emission projections, new source growth, and modeling) should be consistent with current EPA modeling guidance.[8] For O_3 and CO, the projected emissions should reflect the expected actual emissions based on enforceable emission rates and typical production rates.

For CO, a State should address the areawide component of the maintenance demonstration either by showing that future CO emissions will not increase or by conducting areawide modeling. Preferably, the State should carry out hot-spot modeling that is consistent with the Guideline on Air Quality Models (Revised), in order to demonstrate maintenance of the NAAQS. In particular, if the nonattainment problem is related to a pattern of hot-spots then hot-spot modeling should generally be conducted. However, hot-spot modeling is not automatically required. For example, if the nonattainment problem was related solely to stationary point sources, or if highway improvements have been implemented and the associated emission reductions and travel characteristics can be qualitatively documented, then hot-spot modeling is not required. In such cases, adequate documentation as well as the concurrence of Headquarters is needed.

Any assumptions concerning emission rates must reflect permanent, enforceable measures. In other words, a State generally cannot take credit in the maintenance demonstration for reductions unless there are regulations in place requiring those reductions or the reductions are otherwise shown to be permanent. Therefore, the State will be expected to maintain its implemented control strategy despite redesignation to attainment, unless such measures are shown to be unnecessary for maintenance or are replaced with measures that achieve equivalent reductions (see additional discussion under "Contingency Plan"). Emission reductions from source shutdowns can be considered permanent and enforceable to the extent that those shutdowns have been reflected in the SIP and all applicable permits have been modified accordingly.

Modeling used to demonstrate attainment may be relied upon in the maintenance demonstration where the modeling conforms to current EPA guidance and where the State has projected no significant changes in the modeling inputs during the intervening time. Where the original attainment demonstration may no longer be relied upon, States will be expected to remodel using current

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[8]The EPA-approved modeling guidance may be found in the following documents: "Guideline on Air Quality Models (Revised)," OAQPS, RTP, NC (EPA-450/2-78-027R), July 1986; and "PM-10 SIP Development Guideline," OAQPS, RTP, NC (EPA-450/2-86-001), June 1987.

EPA referenced techniques.[9] This may be necessary where, for example, there has been a change in emissions or a change in the siting of new sources or modifications such that air quality may no longer be accurately represented by the existing modeling.

c. Monitoring Network

Once an area has been redesignated, the State should continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR Part 58, to verify the attainment status of the area. The maintenance plan should contain provisions for continued operation of air quality monitors that will provide such verification. In cases where measured mobile source parameters (e.g., vehicle miles traveled congestion) have changed over time, the State may also need to perform a saturation monitoring study to determine the need for, and location of, additional permanent monitors.

d. Verification of Continued Attainment

Each State should ensure that it has the legal authority to implement and enforce all measures necessary to attain and to maintain the NAAQS. Sections 110(a)(2)(B) and (F) of the Clean Air Act, as amended, and regulations promulgated at 40 CFR 51.110(k), suggest that one such measure is the acquisition of ambient and source emission data to demonstrate attainment and maintenance.

Regardless of whether the maintenance demonstration is based on a showing that future emission inventories will not exceed the attainment inventory or on modeling, the State submittal should indicate how the State will track the progress of the maintenance plan. This is necessary due to the fact that the emission projections made for the maintenance demonstration depend on assumptions of point and area source growth.

One option for tracking the progress of the maintenance demonstration, provided here as an example, would be for the State to periodically update the emissions inventory. In this case, the maintenance plan should specify the frequency of any planned inventory updates. Such an update could be based, in part, on the annual AIRS update and could indicate new source growth and other changes from the attainment inventory (e.g., changes in vehicle miles travelled or in traffic patterns). As an alternative to a complete update of the inventory, the State may choose to do a comprehensive review of the factors that were used in developing the attainment inventory to show no significant change. If this review does show a significant change, the State should then perform an update of the inventory.

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[9]See references for modeling guidance cited in footnote 8.

Where the demonstration is based on modeling, an option for tracking progress would be for the State to periodically (typically every 3 years) reevaluate the modeling assumptions and input data. In any event, the State should monitor the indicators for triggering contingency measures (as discussed below).

e. Contingency Plan

Section 175A of the Act also requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area. These contingency measures are distinguished from those generally required for nonattainment areas under section 172(c)(9) and those specifically required for O_3 and CO nonattainment areas under sections 182(c)(9) and 187(a)(3), respectively. For the purposes of section 175A, a State is not required to have fully adopted contingency measures that will take effect without further action by the State in order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expediently once they are triggered. The plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific time limit for action by the State. As a necessary part of the plan, the State should also identify specific indicators, or triggers, which will be used to determine when the contingency measures need to be implemented.

Where the maintenance demonstration is based on the inventory, the State may, for example, identify an "action level" of emissions as the indicator. If later inventory updates show that the inventory has exceeded the action level, the State would take the necessary steps to implement the contingency measures. The indicators would allow a State to take early action to address potential violations of the NAAQS before they occur. By taking early action, States may be able to prevent any actual violations of the NAAQS and, therefore, eliminate the need on the part of EPA to redesignate an area to nonattainment.

Other indicators to consider include monitored or modeled violations of the NAAQS (due to the inadequacy of monitoring data in some situations). It is important to note that air quality data in excess of the NAAQS will not automatically necessitate a revision of the SIP where implementation of contingency measures is adequate to address the cause of the violation. The need for a SIP revision is subject to the Administrator's discretion.

The EPA will review what constitutes a contingency plan on a case-by-case basis. At a minimum, it must require that the State will implement all measures contained in the Part D nonattainment

plan for the area prior to redesignation [see section 175A(d)]. This language suggests that a State may submit a SIP revision at the time of its redesignation request to remove or reduce the stringency of control measures. Such a revision can be approved by EPA if it provides for compensating equivalent reductions. A demonstration that measures are equivalent would have to include appropriate modeling or an adequate justification. Alternatively, a State might be able to demonstrate (through EPA-approved modeling) that the measures are not necessary for maintenance of the standard. In either case, the contingency plan would have to provide for implementation of any measures that were reduced or removed after redesignation of the area.

Summary

As stated previously, this memorandum consolidates EPA's redesignation and maintenance plan guidance and Regions should rely upon it as a general framework in drafting Federal Register notices. It is strongly suggested that the Regional Offices share this document with the appropriate States. This should give the States a better understanding of what is expected from a redesignation request and maintenance plan under existing policy. Any necessary changes to existing Agency policy will be made through our action on specific redesignation requests and the review of section 175A maintenance plans for these particular areas, both of which are subject to notice and comment rulemaking procedures. Thus, in applying this memorandum to specific circumstances in a rulemaking, Regions should consider the applicability of the underlying policies to the particular facts and to comments submitted by any person. If your staff members have questions which require clarification, they may contact Sharon Reinders at (919) 541-5284 for O_3- and CO-related issues, and Eric Ginsburg at (919) 541-0877 for SO_2-, PM-10-, and Pb-related issues.

cc: Chief, Air Branch, Regions I-X
John Cabaniss, OMS
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 17 1993

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) on or after November 15, 1992

FROM: Michael H. Shapiro
Acting Assistant Administrator
for Air and Radiation (ANR-443)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Purpose

The purpose of this memorandum is to address State requests to redesignate from nonattainment to attainment of the ozone and CO NAAQS under section 107. Specifically at issue are requests submitted on or after November 15, 1992 where outstanding Clean Air Act (Act) requirements have not been met. This memo provides guidance on the statutorily-mandated control programs that must be in the EPA-approved SIP if EPA is to approve the redesignation request. The Act's requirements for redesignation and a list of EPA's redesignation policy and guidance are included in Attachments A and B. In the future, further guidance may be provided for redesignations submitted after November 15, 1993.

II. Policy Summary

Section 107(d)(3)(E)(v) of the Act as amended (amended Act) provides that the State must have met all applicable requirements of section 110 and part D in order to be redesignated. Furthermore, section 107(d)(3)(E)(ii) provides that the State must have a fully-approved SIP for the area seeking redesignation.

The EPA is interpreting these section 107 provisions to require satisfactory completion of the current Act planning requirements. Specifically, before EPA can act favorably upon any State redesignation request, the statutorily-mandated control programs of section 110 and part D (that were due prior to the time of the redesignation request) must have been adopted by the State and approved by EPA into the SIP.

Thus, with respect to redesignation requests submitted on or after the Act's deadline for submittal of the required programs, States must generally adopt and provide for implementation of their regulations for all of the programs that were due. States must submit these plans to EPA for incorporation into the SIP.[1] This would include such requirements as emissions inventories and/or emission statements. Such requirements must be met in order for the area to have a fully-approved SIP that meets all requirements applicable to the area under section 110 and part D.

The amended Act, however, also provides that upon redesignation, a State may move measures from the implemented SIP to the contingency plan portion of the SIP if the State demonstrates that such measures are not needed for maintaining the NAAQS. Many areas sought redesignation at or about the same time they were required to adopt and implement the requirements due on November 15, 1992. In many instances, the State will be able to immediately move these measures to the contingency plan without implementation.

III. Exceptions to Policy

The EPA decided to review the requirements to determine if something less than full adoption of these regulations would be acceptable under the Act for areas seeking redesignation. Exceptions to this policy on the States' need to complete the full planning and adoption process for the November 15, 1992 mandated programs are very limited. The language in the Act allows a degree of flexibility in only four program areas. These are: (1) basic inspection and maintenance (I/M), (2) annual updates of vehicle miles traveled (VMT) forecasts and annual

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[1]Note that this represents a departure from earlier guidance for part D new source review (NSR) regulations.

estimates of actual VMT for CO nonattainment areas, (3) nitrogen oxides (NOx) reasonably available control technology (RACT), and (4) small business programs (SBP).

These exceptions are only applicable in areas for which EPA approves a redesignation. The States should be aware that if EPA denies a redesignation request, rules submitted in accordance with this guidance may also be disapprovable. Finally, because EPA anticipates issuing onboard regulations by January 1994, States seeking redesignation of areas classified as moderate may have some flexibility with respect to the Stage II requirement.

Our guidance for State submittals covering these four programs is described in the following paragraphs.

Basic I/M

For areas where maintenance plans do not rely on implementation of a basic I/M program immediately following redesignation, the I/M component of the SIP should include:

1. Legislative authority for basic I/M such that implementing regulations can be adopted without any further legislative action.

2. A provision in the SIP providing that basic I/M be placed in the contingency measures portion of the maintenance plan upon redesignation.

3. An enforceable schedule and commitment by the Governor or his designee for adoption and implementation of a basic I/M program upon a specified, appropriate triggering event.

Note that, for purposes of consideration of a redesignation request submitted after November 15, 1992, the commitment as described in the I/M regulation (see 57 FR 52950, November 5, 1992) is not sufficient to meet the Act's requirement for a fully-approved SIP.

In addition, please note that, EPA's final I/M regulations in 40 CFR part 51 require a fully-adopted I/M program by November 15, 1993. At this time, our preliminary interpretative guidance on basic I/M in this memo is not discussed in the I/M regulations. Therefore, EPA is proceeding to establish this interpretation through regulatory action, thus enabling EPA to accept legislative authority and a commitment to adopt and implement basic I/M regulations for those areas being redesignated to attainment.

VMT Forecasting

The VMT forecasting SIP for CO should include:

1. Annual forecasts of VMT (i.e., average daily VMT for the peak 3-month CO seasons for 1993, 1994, and 1995 in moderate areas above 12.7 ppm, and until 2000 in serious areas).

2. An enforceable commitment by the Governor or his designee to estimate actual annual VMT for each of these years (by September 30 of the following year) and to update the forecast of the VMT in the remaining years.

3. A request that the commitment be moved to the contingency plan portion of the SIP upon redesignation, becoming a contingency provision triggered by a specified triggering event.

4. Adopted contingency measures to reduce CO emissions. The implementation of such measures is contingent upon either: (a) an annual estimate of actual VMT or updated forecast of VMT exceeding the previous forecast for that year, or (b) the area failing to attain by the CO attainment deadline. These contingency measures must meet the requirements of section 187(a)(3) as interpreted by the April 16, 1992, "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," including the requirement that no further action by the State is needed for them to take effect.

NOx RACT

Section 182(f) provides that States may request an exemption from the NOx RACT requirements. The NOx RACT requirements of section 182(f) do not apply if additional reductions of NOx would not contribute to attainment.[2] In an area that did not implement the section 182(f) NOx requirement but did meet the ozone standard, as demonstrated by adequate monitoring data consistent with EPA guidance, it is clear that the additional NOx reductions required by section 182(f) would not contribute to attainment, although they might contribute to maintenance. Therefore, EPA believes that if a State submits a redesignation request along with a section 182(f) exemption request based on monitoring data demonstrating attainment of the ozone NAAQS, further documentation is not required. The State may follow one of two approaches in making such a submittal:

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[2]Note that the section 182(f) exemption for NOx RACT and NSR requirements described in this section is applicable only for States outside an ozone transport region, since only those States fall under the section 182(f) "contribute to attainment" provision.

1. Submit a redesignation request along with a section 182(f) exemption request based solely upon monitoring data showing that the area's air quality is meeting the ozone NAAQS; and submit a maintenance plan SIP revision, which includes a NOx RACT program as a contingency measure. In lieu of adopted NOx RACT rules, such a NOx RACT program may consist of an enforceable schedule and commitment by the Governor or his designee to adopt and implement the NOx RACT rules upon a specified, appropriate triggering event.

2. An exemption request based on both ambient monitoring and urban airshed modeling consistent with EPA guidance that shows additional NOx reductions would not contribute to attainment in the area. In this case, NOx RACT rules do not have to be included as a contingency measure of the maintenance plan.

SBP

For several reasons, the Act can be interpreted as not requiring the section 507 SBP submittal in order for EPA to approve a redesignation request. The SBP submittal is required regardless of whether there are any designated nonattainment areas within the State. In addition, the SBP is not a control measure intended to contribute to the emission reductions achieved by an area; rather it is a service provided to help small businesses comply with requirements of the Act. For the above reasons, EPA is interpreting the SBP as not being an applicable requirement for any specific nonattainment area that is seeking redesignation. However, EPA will continue to ensure that States make SBP submittals in a timely fashion.

Stage II Vapor Recovery

Stage II vapor recovery remains an applicable requirement for moderate ozone nonattainment areas until EPA promulgates onboard vapor recovery regulations. Section 202(a)(6) of the Act provides that once onboard regulations are promulgated, the Stage II regulations required under section 182(b)(3) are no longer applicable for moderate ozone nonattainment areas. Therefore, final redesignation for a moderate nonattainment area that occurs after EPA's onboard regulations are promulgated does not have to include a Stage II SIP control program. For redesignation requests that are submitted before EPA promulgates onboard rules and that do not include Stage II rules for moderate areas, Regional Offices may prepare rulemaking actions proposing to approve the redesignation, if appropriate, as long as final approval occurs after EPA promulgates onboard regulations.

IV. Coordination of SIP Submittals and Redesignation Requests

If the State elects to follow the approach above, the State should submit the SIP control program as described above along with the redesignation request and maintenance plan. The EPA will review the required SIP submittal(s) against EPA policy and guidance and in coordination with the redesignation request and maintenance plan. Approvability of the redesignation is directly related to the approvability of the SIP submittals (i.e., EPA is precluded from approving a redesignation to attainment if the SIP is not approvable).

As a general policy, a State may not relax the adopted and implemented SIP for an area upon the area's redesignation to attainment. States should continue to implement existing control strategies in order to maintain the standard. However, section 175A recognizes that States may be able to move SIP measures to the contingency plan upon redesignation if the State can adequately demonstrate that such action will not interfere with maintenance of the standard. The type of demonstration necessary is dependent upon the pollutant for which the area has been redesignated to attainment.

In order to make such a demonstration for an area redesignated to attainment for CO, EPA believes that the State could submit a revised control strategy demonstration showing that the measure is not necessary to maintain the standard. For ozone, the State would need to submit an attainment modeling demonstration consistent with EPA's current "Guideline on Air Quality Models," showing that the control measure is not needed to maintain the standard. The EPA intends to be very cautious in approving such revisions in cases where the control measures were implemented during the time the area attained the standard; the State's demonstration should indicate an ample margin of safety with respect to maintenance of the standard.

V. Conclusion

In summary, full adoption of all of the statutorily-required programs, as well as a schedule and an enforceable commitment for an implementation date, are necessary for redesignation to attainment from nonattainment for ozone or CO if the redesignation request is submitted after the statutory due date for the program. The few exceptions to this requirement are basic I/M, annual updates of VMT forecasts, and estimates of actual VMT, NOx RACT, and SBP.

If you have any questions, please contact Sharon Reinders at (919) 541-5284, or Annie Nikbakht at (919) 541-5246.

Attachments

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Attachment A

Criteria For Redesignation Under Section 107(d)

Section 107(d)(3)(E) of the Act states five criteria that must be met before the Administrator may redesignate an area to attainment. The criteria are:

1. The EPA has determined that the NAAQS have been attained.

2. The applicable implementation plan has been fully approved by EPA under section 110(k).

3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.

4. The State has met all applicable requirements for the area under section 110 and part D.

5. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under section 175A.

Attachment B

The EPA policies for implementing section 107 of the Act for redesignations are contained in the following memorandums.

1. "Procedures for Processing Requests to Redesignate Areas to Attainment," John Calcagni, Director, Air Quality Management Division, September 4, 1992.

2. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," John Calcagni, Director, Air Quality Management Division, October 28, 1992.

3. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992.

4. "Maintenance Plans for Redesignation of Ozone and Carbon Monoxide Nonattainment Areas," G. T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, April 30, 1992.

In the event that EPA does not approve the redesignation, the applicable I/M program requirements and guidance can be found in 57 FR 52950, November 5, 1992 and in 40 CFR part 51. The applicable VMT forecast guidance is described in the document entitled, "Section 187 VMT Forecasting and Tracking Guidance," January 1992.

APPENDIX C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

12/19/2000

SUBJECT: Technical Support Document - Commonwealth of Pennsylvania - Determination of Attainment of Ozone Standard by the Pittsburgh-Beaver Valley and Lancaster Ozone Nonattainment Areas and Determination Regarding Applicability of Certain Reasonable Further Progress and Attainment Demonstration Requirements for the Pittsburgh-Beaver Valley Ozone Nonattainment Area.

FROM: Jill Webster, Environmental Scientist Jill Webster 12/19/00
Ozone and Mobile Sources Branch, (3AP21)

TO: David L. Arnold, Chief D Arnold
Ozone and Mobile Sources Branch, (3AP21)

I. Background

Section 107(d)(4) of the Clean Air Act (the Act) required the States and EPA to designate areas as attainment, nonattainment, or unclassifiable for ozone as well as other pollutants for which national ambient air quality standards (NAAQS) have been set. Section 181(a)(1) (table 1) required that ozone nonattainment areas be classified as Marginal, Moderate, Serious, Severe, or Extreme, depending on their air quality. In a series of **Federal Register** notices, EPA completed this designation and classification process. See [56 FR 58694] (November 6, 1991); [57 FR 56762] (Nov. 30 1992); and [59 FR 18967] (April 21, 1994). By these notices, EPA designated and classified all areas of the country for ozone. The Pittsburgh area was at that time designated as moderate ozone nonattainment. The Pittsburgh-Beaver Valley area, consists of Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland counties. The Lancaster area, consisting of Lancaster county, was designated as marginal nonattainment.

Moderate areas are required by subpart 2 of Part D of Title 1 of the Act to submit various State Implementation Plans (SIP) and air quality plans that serve to bring the area into attainment. [Marginal areas are not subject to these specific provisions of subpart 2 of Part D of Title 1 of the Act.] Therefore, the Pittsburgh area, being classified as moderate ozone nonattainment, was subject to the provisions related to reasonable further progress (RFP), attainment demonstration, and other related requirements of subpart 2 of Part D of Title 1. [The Commonwealth submitted a 15% plan which EPA conditionally limited approved on January 14, 1998 [63 FR 2147]. Actions related to the Commonwealth's15% RFP for Pittsburgh, are the subject of separate rulemaking.]

In a memorandum dated May 10, 1995, from John Seitz, Director, Office of Air Quality Planning and Standards, to the Regional Air Division Directors, entitled "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard", EPA determined that it is reasonable to interpret provisions regarding reasonable further progress (RFP) and attainment demonstrations, along with certain other related provisions, so as not to require SIP submissions if an ozone nonattainment area subject to those requirements is monitoring attainment of the ozone standard (i.e., attainment of the NAAQS demonstrated with three consecutive years of complete, quality-assured air quality monitoring data). The determination that an area may waive these requirements is not dependent on the submittal of a redesignation request and does not relieve an area of other statutory requirements unrelated to RFP and attainment demonstrations. This memo is attached as Appendix A.

II. EPA Analysis

EPA has reviewed the ambient air monitoring data for ozone (consistent with the requirements contained in 40 CFR Part 58 and recorded in AIRS) for the Pittsburgh-Beaver Valley and Lancaster nonattainment areas in the Commonwealth of Pennsylvania for the years 1998-2000. This information is in Appendix B. On the basis of that review EPA has concluded that the area attained the ozone standard during the 1998-2000 period.

The current design value for the Pittsburgh-Beaver Valley nonattainment area using ozone monitoring data for 1998-2000 is 123 part per billion (ppb). The average annual number of expected exceedances is 1.0 for that same time period. The current design value for the Lancaster nonattainment, area using 1998-2000, ozone monitoring data is 121 ppb and the number of expected exceedances for that same time period is 0.67. An area is considered in attainment of the standard if the average annual number of expected exceedances is less than or equal to 1.0. Thus, these areas are no longer recording violations of the air quality standard for ozone.

III. Conclusions

EPA has determined that the Pittsburgh-Beaver Valley and Lancaster nonattainment areas have attained the ozone standard and continue to attain the standard at this time. As a consequence of this determination, I recommend that the requirements for sections 172(c)(1) and 182 (b)(1) concerning submission of an attainment demonstration and the requirements of section 172(c)(9) concerning contingency measures be no longer applicable to the Pittsburgh area so long as this area does not violate the ozone standard.

Appendix A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAY 10 1995

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air, Pesticides and Toxics Management Division, Regions I and IV
Director, Air and Waste Management Division, Region II
Director, Air, Radiation and Toxics Division, Region III
Director, Air and Radiation Division, Region V
Director, Air, Pesticides and Toxics Division, Region VI
Director, Air and Toxics Division, Regions VII, VIII, IX, and X

I. Policy

This memorandum sets forth EPA's interpretation of certain requirements of subpart 2 of part D of title I of the Clean Air Act as they relate to ozone nonattainment areas that are meeting the ozone NAAQS. Specifically, it addresses whether such areas must submit SIP revisions concerning reasonable further progress and attainment demonstrations. The requirements at issue include the 15 percent plan and attainment demonstration requirements of section 182(b)(1) for moderate and above ozone nonattainment areas and the attainment demonstration and post-1996 RFP requirements of section 182(c)(2) for serious and above ozone nonattainment areas. Related requirements include the moderate ozone nonattainment requirements of section 172(c)(9) concerning contingency measures, the serious ozone nonattainment area requirements of section 182(c)(9) concerning contingency measures, section 182(c)(5) concerning transportation control measures and section 182(g) concerning milestones. They also include the elements of the severe and extreme ozone nonattainment area requirements of section 182(d)(1)(A) concerning vehicle miles traveled that are related to RFP requirements.

For the reasons described below, EPA believes that it is reasonable to interpret these provisions so as not to require areas that are meeting the ozone standard to make the SIP submissions to EPA described in the provisions as long as the areas continue to meet the standard. If such an area were to monitor a violation of the standard prior to being redesignated to attainment, however, the area would have to address the pertinent requirements and submit the SIP revisions described in those provisions to EPA.

This memorandum also describes the process by which EPA will determine that an area is attaining the ozone standard and need not make these SIP submissions.

II. Interpretation and Legal Rationale

The EPA believes it is reasonable to interpret provisions regarding RFP and attainment demonstrations, along with related requirements, so as not to require SIP submissions if an ozone nonattainment area subject to those requirements is in fact attaining the ozone standard (i.e., attainment of the NAAQS is demonstrated with 3 consecutive years of complete, quality-assured air quality monitoring data). The EPA has previously interpreted the general provisions of subpart 1 of part D of title I (sections 171 and 172) so as not to require the submission of SIP revisions concerning RFP, attainment demonstrations, or contingency measures, and EPA believes it is appropriate to interpret the ozone-specific provisions of subpart 2 in the same manner.

First, with respect to RFP, section 171(1) states that, for purposes of part D of title I, RFP "means such annual incremental reductions in emissions of the relevant air pollutant as are required by this part or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable NAAQS by the applicable date." Thus, whether dealing with the general RFP requirement of section 172(c)(2), or the more specific RFP requirements of subpart 2 for classified ozone nonattainment areas (the 15 percent plan requirement of section 182(b)(1) and the 3 percent per year requirement of section 182(c)(2)),[1] the stated purpose of RFP is to ensure attainment by the applicable attainment date. If an area has in fact attained the standard, the stated purpose of the RFP requirement will have

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[1]EPA notes that paragraph (1) of subsection 182(b) is entitled "PLAN PROVISIONS FOR REASONABLE FURTHER PROGRESS" and that subparagraph (B) of paragraph 182(c)(2) is entitled "REASONABLE FURTHER PROGRESS DEMONSTRATION," thereby making it clear that both the 15 percent plan requirement of section 182(b)(1) and the 3 percent per year requirement of section 182(c)(2) are specific varieties of RFP requirements.

already been fulfilled and EPA does not believe that the area need submit revisions providing for the further emission reductions described in the RFP provisions of section 182(b)(1) and 182(c)(2)(B) and (C).

The EPA notes that it took this view with respect to the general RFP requirement of section 172(c)(2) in the General Preamble for the Interpretation of Title I of the Clean Air Act Amendments of 1990 (57 FR 13498 (April 16, 1992)), and it is now extending that interpretation to the specific provisions of subpart 2. In the General Preamble, EPA stated, in the context of a discussion of the requirements applicable to the evaluation of requests to redesignate nonattainment areas to attainment, that the "requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point" (57 FR 13564).[2]

Second, with respect to the attainment demonstration requirements of section 182(b)(1) and 182(c)(2), an analogous rationale leads to the same result. Section 182(b)(1) requires that the plan provide for "such specific annual reductions in emissions . . . as necessary to attain the primary NAAQS by the attainment date applicable under this Act." Section 182(c)(2)(A) simply requires a "demonstration that the plan, as revised, will provide for attainment of the ozone NAAQS by the applicable attainment date." As with the RFP requirements, if an area has in fact monitored attainment of the standard, EPA believes there is no need for an area to make a further submission containing additional measures to achieve attainment. This is also consistent with the interpretation of the section 172(c) requirements provided by EPA in the General Preamble to title I, as EPA stated there that no other measures to provide for attainment would be needed by areas seeking redesignation to attainment since "attainment will have been reached" (57 FR 13564; see also September 4, 1992 Calcagni memorandum).

Other SIP submission requirements are linked with these attainment demonstration and RFP requirements, and similar reasoning applies to them. The first of these additional

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[2]See also "Procedures for Processing Requests to Redesignate Areas to Attainment," from John Calcagni, Director, Air Quality Management Division, to Regional Air Division Directors, September 4, 1992, at page 6 (stating that the "requirements for reasonable further progress . . . will not apply for redesignations because they only have meaning for areas not attaining the standard") (hereinafter referred to as "September 1992 Calcagni memorandum").

requirements are the contingency measure requirements of section 172(c)(9) and section 182(c)(9). The EPA has previously interpreted the contingency measure requirement of section 172(c)(9) as no longer being applicable once an area has attained the standard since those "contingency measures are directed at ensuring RFP and attainment by the applicable date" (57 FR 13564; see also September 4, 1992 Calcagni memorandum). Similarly, as the section 182(c)(9) contingency measures are linked with the RFP requirements of section 182(b)(1) and 182(c)(2), the requirement of section 182(c)(9) no longer applies once an area has attained the standard.

Other requirements related to the attainment demonstration and RFP provisions include: (1) the section 182(c)(5) requirement regarding the submission of a demonstration as to whether various parameters related to transportation "are consistent with those used for the area's demonstration of attainment"; (2) the section 182(g) requirements concerning milestones that are based on the section 182(b)(1) and 182(c)(2)(B) and (C) submissions; and (3) the elements of the section 182(d)(1)(A) requirement for SIP revisions identifying and adopting transportation control strategies to achieve reductions in motor vehicle emissions that relate to the RFP requirements of section 182(b)(1)(A) and 182(c)(2)(B). Inasmuch as each of these requirements is linked with the attainment demonstration or RFP requirements of section 182(b)(1) or 182(c)(2), if an area is not subject to the requirement to submit the underlying attainment demonstration or RFP plan, it need not submit the related SIP revision either.

The EPA emphasizes that this interpretation does not extend to requirements of subpart 2 that are not linked by the language of the Act with the attainment demonstration and RFP requirements. For example, this interpretation does not apply to requirements such as VOC RACT requirements, for which, in contrast to NOx RACT requirements under section 182(f), the Act does not establish a mechanism to grant exemptions if an area has attained the standard, or to the requirements to submit SIP revisions providing for basic or enhanced I/M programs.

The EPA also emphasizes that the lack of a requirement to submit SIP revisions concerning these RFP, attainment demonstration, and other related requirements exists only for as long as a nonattainment area continues to monitor attainment of the standard. If such an area experiences a violation of the NAAQS, the basis for the requirements not being applicable would no longer exist. Therefore, the area would again be subject to a requirement to submit the pertinent SIP revision or revisions and would need to address those requirements. Thus, a determination that an area need not submit one of the SIP submittals amounts to no more than a suspension of the requirement for so long as the area continues to attain the standard. If EPA ultimately

redesignates the area to attainment, then the area will be entirely relieved of these requirements to the extent the maintenance plan for the area does not rely on them.

Also, EPA notes that in the case of a multistate nonattainment area, the entire multistate nonattainment area must have monitoring data demonstrating attainment for the SIP submission requirements to be suspended. Thus, the requirements applicable to one part of such an area may not be suspended on the basis of a determination only that that part of the nonattainment area is monitoring attainment. The EPA's Regional Offices should coordinate these determinations for any multistate nonattainment areas that involve more than one Region.

III. Process

The EPA Regional Offices will conduct individual rulemakings concerning areas that have 3 consecutive years of clean air quality monitoring data demonstrating attainment of the ozone standard to make binding determinations that the areas have attained the standard and need not make whichever of the SIP revisions discussed above are pertinent. Since EPA has the relevant air quality data in its possession, no submission from a State would be required to initiate this process. However, a State would be free to submit a petition to the appropriate EPA Regional Office to notify the office that it believes that a certain nonattainment area is eligible for these determinations on the basis of monitored attainment of the ozone NAAQS.

As noted above, these determinations would be contingent on the existence of monitoring data for the areas that continue to demonstrate attainment. If EPA subsequently determines that an area has violated the standard, the basis for the determination that the area need not make the pertinent SIP revisions would no longer exist. The EPA would notify the State of that determination and would also provide notice to the public in the Federal Register. Such a determination would mean that the area would thereafter have to address the pertinent SIP requirements within a reasonable amount of time, which EPA would establish taking into account the individual circumstances surrounding the particular SIP submissions at issue.

The State must continue to operate an appropriate air quality monitoring network, in accordance with 40 CFR part 58, to verify the attainment status of the area. The air quality data relied upon for the above determinations must be consistent with 40 CFR part 58 requirements and other relevant EPA guidance and recorded in EPA's Aerometric Information Retrieval System (AIRS).

Determinations made by EPA in accordance with this interpretation would not shield an area from EPA action to require emission reductions from sources in the area where there

is evidence, such as photochemical grid modeling, showing that emissions from sources in the area contribute significantly to nonattainment in, or interfere with maintenance by, other nonattainment areas. The EPA has authority under the Act (section 110(a)(2)(D) in the case of areas in other States and section 110(a)(2)(A) in the case of intrastate areas) to require emissions reductions if necessary and appropriate to deal with transport situations.

IV. Consequences for Redesignations, Sanctions, and Conformity

Determinations made by EPA that an area has attained the NAAQS and need not make one or more of the SIP submissions discussed above is not equivalent to the redesignation of the area to attainment. Attainment of the standard is only one of the criteria set forth in section 107(d)(3)(E) that must be satisfied for an area to be redesignated to attainment. To be redesignated, the State must submit and receive full approval of a redesignation request for the area that satisfies all of the criteria of that section, including the requirement of a demonstration that the improvement in the area's air quality is due to permanent and enforceable reductions, and the requirements that the area have a fully-approved SIP which meets all of the applicable requirements under section 110 and part D, and a fully-approved maintenance plan.

If an area for which the determination of attainment is made has submitted or subsequently submits a redesignation request, the SIP submissions discussed in this memorandum would not be required for the area's redesignation request to be approved since they would no longer be considered applicable requirements under section 107(d)(3)(E). If the area violates the standard prior to final action on the redesignation request, however, not only would the requirements again become applicable, but the redesignation request could not be approved because the area would no longer meet the criterion of having attained the standard.

As a consequence of a determination that an area has monitoring data demonstrating attainment of the ozone standard, thereby removing, at least temporarily, the pertinent SIP submittal requirements discussed above, any sanction clock that had been started as a consequence of the failure to make such a submission, the incompleteness of such a submission, or the disapproval of such a submission, would be stopped since the deficiency that had led to the starting of the clock would no longer exist.

The issuance of a determination pursuant to this policy will have no immediate impact on the way conformity is demonstrated. Areas will continue to demonstrate conformity using the build/no-build test and less-than-1990 test (section 51.436-51.446 of the

conformity rule), and the 15 percent SIP if one has been submitted (and attainment/RFP SIP, if one with a budget has been submitted).

Since areas that are the subject of determinations pursuant to this policy will not be required to submit RFP or attainment demonstration SIP's, those areas will not generally be in the control strategy period for conformity purposes (i.e., have a control strategy SIP approved and build/no-build test no longer required) for so long as the area does not violate the standard. Those areas will not generally have approved budgets until a maintenance plan is approved as part of the approval of a redesignation request, so the build/no-build test and less-than-1990 test--in addition to any applicable submitted budgets--will be required until then. (A maintenance plan budget does not apply for conformity purposes until the maintenance plan has been approved, except as provided by section 51.448(i) of the conformity rule (which applies to areas that are required to submit a 15 percent SIP but submit a maintenance plan instead).)

If an area receiving a determination pursuant to this policy had previously submitted a 15 percent or attainment SIP, it may choose to withdraw the submitted SIP through the submission of a letter from the Governor or his or her designee in order to eliminate the applicability of its motor vehicle emission budget for conformity purposes. This is because that area would not be subject to the 15 percent and attainment demonstration requirements of section 182(b)(1) for so long as the area continues to attain the standard. If the submitted SIP is not withdrawn, the budget in that submission will continue to apply for conformity purposes. If the submitted 15 percent or attainment SIP is withdrawn, only the build/no-build and less-than-1990 tests would apply until a maintenance plan is approved.

However, areas that are already demonstrating conformity to a submitted maintenance plan pursuant to section 51.448(i) may continue to do so, or may elect to withdraw the applicability of the submitted maintenance plan budget for conformity purposes until the maintenance plan is approved. The applicability may be withdrawn through the submission of a letter from the Governor or his or her designee. If the applicability of the submitted maintenance plan budget is withdrawn for conformity purposes, the build/no-build and less-than-1990 tests will apply until the maintenance plan is approved.

For areas which receive a determination pursuant to this policy and whose conformity status has lapsed due to a failure to submit a 15 percent SIP or to the submission of an incomplete 15 percent SIP without a protective finding, the lapse imposed by section 51.448(b) and (c)(1)(ii) will be removed. However, the conformity status of the plan and TIP cannot be restored if

conformity has lapsed for any other reason (e.g., failure to redetermine conformity by a certain date).

If you have any questions, please feel free to call me or Sally Shaver. The contact persons for this policy are Carla Oldham at (919) 541-3347 and Kathryn Sargeant at (313) 668-4441 for transportation conformity requirements.

cc: Rob Brenner
Alan Eckert
Tom Helms
Phil Lorang
Rich Ossias
Margo Oge
Joe Paisie
John Seitz
Sally Shaver
Lydia Wegman
Dick Wilson

Appendix B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Air Quality Analysis for the Pittsburgh-Beaver Nonattainment Areas **Date:** December 4, 2000

FROM: Charles App, Director
Office of Ecological Assessment and Management (3ES10)

TO: David Arnold, Chief
Ozone and Mobile Sources Branch (3AP21)

This memo is in response to your request for assistance in the assessment of the 1998-2000 ozone monitoring data in the Pittsburgh-Beaver County area. The assessment involves determining if any ozone monitoring site has measured elevated levels of ozone concentration that demonstrates a violation of the 1-hour National Ambient Air Quality Standard (NAAQS) of 0.12 ppm.

40 CFR, part 81.339, "Pennsylvania ozone area" identifies the Pittsburgh-Beaver County area to include Allegheny County, Armstrong County, Beaver County, Butler County, Fayette County, Washington County and Westmoreland County. Fourteen ozone monitors are located in the Pittsburgh-Beaver County area. The 1998, 1999 and 2000 hourly ozone data for these monitors were obtained from EPA's Aerometric Information Retrieval System (AIRS). The assessment of ozone data was carried out by using the following two documents: *EPA2-450/4-79-003 OAQPS No.1.2-108 "Guidelines for the Interpretation of Ozone Air Quality Standards"* and *EPA Memorandum Subject "Ozone and Carbon Monoxide Design Value Calculations" from William G. Laxton, Director Technical Support Division (MD-14) June 18, 1990 (http://www.epa.gov/oar.oaqps/greenbk/laxton.html).* According to the guidance, an area is determined to attain the 1-hour NAAQS if the fourth highest ozone value during the 3-year period does not exceed 0.12 ppm.

The Pittsburgh-Beaver area's attainment status was determined by using all available quality-assured data for the 3-year period, 1998, 1999 and 2000. Each of the monitoring sites was evaluated separately to determine if all three years of ozone data were reported in AIRS and to determine if the fourth highest value (also known as the design value) during the 3-year period exceeded the ozone standard of 0.12 ppm. Please note that only one monitoring site out of the 14 listed did not record all 3 years of ozone data in AIRS. The monitoring site located at Donohue Road in Westmoreland (AIRS #: 421290008) recorded only 1999 and 2000 ozone data in AIRS, as shown in the attached spreadsheet. The 1998 ozone monitoring data were not reported in AIRS because of instrument malfunction. According to 40 CFR, part 58, if only two

complete years of data are available, the third highest value is used as the design value. Our assessment indicates that none of the 14 ozone monitoring sites measured levels that represent a violation of the 1-hour NAAQS for ozone for the period of 1998-2000. The attached spreadsheet summarizes the data for the 14 ozone monitoring sites.

If you have any questions concerning this matter, please contact me or have your staff contact Ted Erdman at 4-2766 or Pam Hargett at 4-2716.

cc:
Judy Katz (3AP00)
Marcia L. Spink (3AP00)
Jill Webster (3AP21)

AIR QUALITY ANALYSIS FOR THE PITTSBURGH-BEAVER NONATTAINMENT AREAS
1998 thru 2000

Armstrong Co (Kittanning) AIRS#: 420050001 Glade Dr. & Notle Rd.

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	98	113	113	113	110
1999	1	1	98	134	121	120	117
2000	0	0	99	104	103	92	91

Average No. Expected Exceedances: 1
Design Value: 117
Years of Complete Data: 3

Beaver Co. AIRS#: 420070002 Rte 168 & Tomlinson Road

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	93	115	113	111	106
1999	0	0	99	122	116	111	105
2000	0	0	97	99	95	91	89

Average No. Expected Exceedances: 0
Design Value: 113
Years of Complete Data: 3

Beaver Co. AIRS#: 420070005 1015 Sebring Rd

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	115	113	101	101
1999	2	2	99	135	132	120	117
2000	0	0	96	102	96	94	87

Average No. Expected Exceedances: 2
Design Value: 117
Years of Complete Data: 3

Beaver Co. AIRS#: 420070014 Eighth Street & River Alley

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	121	116	113	113
1999	2	2	97	133	131	102	99
2000	0	0	100	106	99	98	92

Average No. Expected Exceedances: 2
Design Value: 116
Years of Complete Data: 3

Washington Co. (Charleroi) AIRS#: 421250005 Cha[redacted]/1 Waste Treatment Plant

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	3	3	98	130	127	126	123
1999	0	0	98	118	115	111	107
2000	0	0	100	112	110	109	91

Average No. Expected Exceedances: 3
Design Value: 123
Years of Complete Data: 3

Washington Co. (Washington) AIRS#: 421250200 Mccarrell & Fayette Street

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	100	115	112	111	107
1999	0	0	99	110	106	105	103
2000	0	0	99	114	105	101	87

Average No. Expected Exceedances: 0
Design Value: 111
Years of Complete Data: 3

Washington Co. (Washington) AIRS#: 421255001 Hillman State Park-Kings Creek Rd

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	96	114	109	109	104
1999	0	0	99	113	110	106	106
2000	0	0	97	98	98	96	94

Average No. Expected Exceedances: 0
Design Value: 109
Years of Complete Data: 3

Westmoreland Co. AIRS#: 421290006 Old William Penn Hwy & Sardis Ave

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	103	101	97	96
1999	1	1	100	132	115	108	99
2000	0	0	100	110	103	92	88

Average No. Expected Exceedances: 1
Design Value: 108
Years of Complete Data: 3

Westmoreland Co. AIRS#: 421290008 Donohoe Rd-Penn Dot

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998*							
1999	2	2	100	145	125	111	110
2000	0	0	85	99	97	97	89

Average No. Expected Exceedances: 2
Design Value: 111
Years of Complete Data: 2
* No data record in AIRS because of instrument malfunctions.

Allegheny Co. AIRS#: 420030008 Bapc 301 39th St., Bldg #7

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	120	118	104	103
1999	2	2	98	128	126	106	100
2000	0	0	100	97	96	96	94

Average No. Expected Exceedances: 2
Design Value: 118
Years of Complete Data: 3

Allegheny Co. AIRS#: 420030067 Old Oakdale Rd South Fayette

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	1	1	95	125	115	113	112
1999	0	0	100	123	118	112	110
2000	0	0	97	107	106	103	103

Average No. Expected Exceedances: 1
Design Value: 115
Years of Complete Data: 3

Allegheny Co. (Penn Hills) AIRS#: 420030088 12245 Frankstown Rd

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	96	113	112	110	108
1999	2	2	99	131	128	112	108
2000	0	0	96	101	100	100	97

Average No. Expected Exceedances: 2
Design Value: 112
Years of Complete Data: 3

Allegheny Co. AIRS#: 420031005 12245 Frankstown Rd

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	112	111	108	107
1999	2	2	99	137	127	114	113
2000	0	0	97	104	102	98	97

Average No. Expected Exceedances: 2
Design Value: 113
Years of Complete Data: 3

Allegheny Co. AIRS#: 420030010 Carnegie Science Ctr

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	94	112	105	105	103
1999	1	1	98	135	120	118	116
2000	0	0	100	112	111	108	94

Average No. Expected Exceedances: 1
Design Value: 116
Years of Complete Data: 3

*Measure Exceed - Number of days in the year when a 1-hour value exceeded the 1-hour standard.

Expected Exceed - Calculated (estimated) number of days in the year when 1-hour values are expected to exceed the 1-hour standard, after ccompensating for days when scheduled monitoring did not occur.

MAX, 2nd MAX, 3rd MAX, 4th MAX - The four highest max values by taking the highest 1-hour value of each day, pick the top four of those values.

Jill

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Air Quality Analysis for the Lancaster County Nonattainment Areas

Date: December 4, 2000

FROM: Charles App, Director
Office of Ecological Assessment and Management (3ES10)

TO: David Arnold, Chief
Ozone and Mobile Sources Branch (3AP221)

This memo is in response to your request for assistance in the assessment of the 1998-2000 ozone monitoring data in the Lancaster County area. The assessment involves determining if any ozone monitoring site has measured elevated levels of ozone concentration that demonstrates a violation of the 1-hour National Ambient Air Quality Standard (NAAQS) of 0.12 ppm.

40 CFR part 81.339, "Lancaster County ozone area" identifies the Lancaster County area as being only the county itself. There is only one monitoring site in this area. The 1998, 1999 and 2000 hourly ozone data were obtained from EPA's Aerometric Information Retrieval System (AIRS) and our assessments of ozone data were carried out by using the following two documents: *EPA2-450/4-79-003 OAQPS No.1.2-108 "Guidelines for the Interpretation of Ozone Air Quality Standards"* and *EPA Memorandum Subject "Ozone and Carbon Monoxide Design Value Calculations" from William G. Laxton, Director Technical Support Division (MD-14) June 18, 1990 (http://www.epa.gov/oar.oaqps/greenbk/laxton.html).* According to the guidance, an area is determined to attain the 1-hour NAAQS if the fourth highest ozone value during 3-year period did not exceed 0.12 ppm.

The Lancaster County area's attainment status was determined by using all available quality-assured data for the 3-year period, 1998, 1999 and 2000. Based on our assessment of the ozone data in Lancaster County, the ozone monitoring site did not measure levels of ozone concentrations that represent a violation of the 1- hour NAAQS for ozone for the period of 1998-2000. The attached spreadsheet summarizes the data for the Lancaster County monitoring site.

If you have any questions concerning this matter, please contact me or have your staff contact Ted Erdman at 4-2766 or Pam Hargett at 4-2716.

cc:
Judy Katz (3AP00)
Marcia L. Spink (3AP00)
Jill Webster (3AP21)

AIR QUALITY ANALYSIS FOR THE LANCASTER COUNTY NONATTAINMENT AREAS
1998 thru 2000

Lancaster AIRS#: 420710007 Abraham Lincoln Jr. High

Year	Measure Exceed	Expected Exceed	% Season Monitored	MAX	2nd	3rd	4th
1998	0	0	99	121	119	118	115
1999	2	2	100	132	127	123	116
2000	0	0	100	113	107	96	95

Average No. Expected Exceedances: 2
Design Value: 121
Years of Complete Data: 3

*Measure Exceed - Number of days in the year when a 1-hour value exceeded the 1-hour standard.

Expected Exceed - Calculated (estimated) number of days in the year when 1-hour values are expected to exceed the 1-hour standard, after ccompensating for days when scheduled monitoring did not occur.

MAX, 2nd MAX, 3rd MAX, 4th MAX - The four highest max values by taking the highest 1-hour value of each day, pick the top four of those values.